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(54) Title: METHODS AND DEVICES FOR DETERMINING BRAIN STATE

(57) **Abstract:** The present invention relates to methods and devices for determining the state of a neural system. In one embodiment, a plurality of stimuli to the system can be delivered to the system, and then the resulting respective responses can be analyzed to determine whether the system state is static, or whether it is undergoing dynamic changes. In another aspect of the invention, a single stimulus having a plurality of components can be administered, and the responses to each component can be contrasted and compared to determine the state of the neural system. In each case, this information can be used to predict the occurrence of neural perturbations or episodes associated with a change in the state of the neural system.

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